

BY 134 as illustrated in Figure 5. The cam 166 generates a clamping force on the cable 184 and prevents reverse travel of the cable 184 and therefore the buckle assembly 30. The cable locking described above results in a high tensile load path directly from the buckle assembly 30 through the cable 184 and into the cam 166 and the mounting stud 168. It should be appreciated that the scallops 170 engage the cable 184. It should also be appreciated that torque and clamping force are on the same side of the stud 168 and the torque lever arm has a predetermined ratio such as 2:1 of torque lever length to clamping lever length. It should further be appreciated that the seat restraint tensioner 110 may be used for a frontal impact condition for pre-loading before the occupant moves to load the buckle assembly 30 and may be used for a rollover condition having a much faster stroke rate.

IN THE CLAIMS:

Please substitute amended claims 1, 16, and 28 as follows for the pending claims with the same number:

1. (AMENDED) A seat restraint tensioner for a seat restraint system in a vehicle comprising:

a cable having a first end and a second end, said first end being operatively connected to a seat restraint of the seat restraint system;

a movable mechanism connected to said second end of said cable to apply a force for tightening the seat restraint when activated; and

a rotatable cam cooperating with said cable to rotate in a counterclockwise direction to generate a clamping force toward the seat restraint to clamp said cable between said

BB cam and a clamping surface to prevent reverse travel of said cable after tightening the seat restraint.

16. (AMENDED) A seat restraint tensioner for a seat restraint system in a vehicle comprising:

a frame for operative connection to vehicle structure;

a housing connected to said frame;

a movable piston disposed in said housing;

BL a cable fitting for connection to a buckle assembly of the seat restraint system above said frame;

a cable having one end operatively connected to said cable fitting and another end operatively connected to said piston;

a gas generator operatively connected to said housing for expelling a gas to move said piston to apply a force for pulling-down the buckle assembly; and

a rotatable cam pivotally connected to said frame and having a lever arm and clamping surface on the same side of a pivot for said cam, said cam cooperating with said cable to rotate in a counterclockwise direction to generate a clamping force on said cable toward the buckle assembly to prevent reverse travel of said cable after pulling-down the buckle assembly.

28. (AMENDED) A seat restraint system for a vehicle comprising:

BL a buckle assembly;

a frame for connection to vehicle structure of the vehicle, said frame having a clamping surface;

a housing connected to said frame;
 a movable piston disposed in said housing;
 a cable fitting connected to said buckle assembly;
 a cable having one end operatively connected to said cable fitting and another end
 operatively connected to said piston;
 a gas generator operatively connected to said housing for expelling a gas to move
 said piston to apply a force for pulling-down said buckle assembly; and
 a rotatable cam pivotally connected to said frame and cooperating with said cable
 to rotate in a counterclockwise direction to generate a clamping force toward said buckle
 assembly to clamp said cable between said cam and said clamping surface to prevent reverse
 travel of said cable after pulling-down said buckle assembly.

Please add new claim 29 as follows:

29. (NEW) A seat restraint tensioner for a seat restraint system in a vehicle
 comprising:
 a frame for operative connection to vehicle structure and a housing connected to
 said frame, said frame having a clamping surface at an angle greater than zero relative to a
 longitudinal axis of said housing;
 a movable piston disposed in said housing;
 a cable fitting for connection to a buckle assembly of the seat restraint system
 above said frame;

a cable having one end operatively connected to said cable fitting and another end operatively connected to said piston;

a gas generator operatively connected to said housing for expelling a gas to move said piston to apply a force for pulling-down the buckle assembly; and

a rotatable cam pivotally connected to said frame and cooperating with said cable to generate a clamping force toward the seat restraint to clamp said cable between said cam and said clamping surface to prevent reverse travel of said cable after pulling-down the buckle assembly.
